Autonomous Agents and Multiagent Systems
2007/2008

Lab 10 – Deliberative Agents in Counter Strike

Objectives

- Implementation of BDI agents for Counter-Strike.
- Implementation of cooperative strategies.

Exercise

For the project students are required to propose *deliberative agents*, based on the BDI (*beliefs*, *desires* and *intentions*) architecture, for Counter-Strike.

1. Propose *beliefs*, *desires* and *intentions* to allow terrorists either to plant the bomb, protected the armed bomb or seek enemies.

2. Propose and implement *plans* which allow terrorists to achieve the aforementioned intentions.

3. Propose *beliefs*, *desires* and *intentions* to allow counter-terrorists either to protect bombsites, seek the bomb or seek enemies.

4. Propose and implement *plans* which allow counter-terrorists to achieve the aforementioned intentions.

5. Within the BDI scheme, propose a cooperative strategy which allows terrorists to protect the bomber or the armed bomb.

6. Within the BDI scheme, propose a cooperative strategy which allows counter-terrorists to seek the bomb or protect the agent defusing the bomb.

Note: See chapter 4 of [Wooldridge02] (or the slides about Deliberative Agents), or the lab 3 assignment, for information about the BDI architecture.

Reference: [Wooldridge02] - Wooldridge, M.; *An Introduction to Multiagent Systems*; John Wiley & Sons, Ltd; 2002